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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,588	09/17/2003	Bryan A. Zachary	S71775USD1	3289
28805	7590	08/11/2004	EXAMINER	
RAYMOND R. FERRERA INTELLECTUAL PROPERTY SERVICES 2502 LIVELY LANE SUGAR LAND, TX 77479			ROGERS, DAVID A	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/663,588	Applicant(s) ZACHARY ET AL.	
	Examiner David A. Rogers	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

16.07

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the key switch as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

It is recommended that the applicant submit similar versions of the formal drawings from the parent application (modified to show all part numbers as disclosed in the specification).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not

accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 25 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 24 and 26 are each directed to methods to test a first or a second operational mode of a solenoid-operated valve. Claim 25, which depends on claim 24 and incorporates all of its limitations, is directed only to the structure of a solenoid-operated valve. Likewise, claim 27, which depends on claim 26 and incorporates all of its limitations, is only directed to the structure of a solenoid-operated valve. See *Ex parte Lyell*, 17 USPQ 2d. 1548, which stated, *inter alia* that:

Claim which combines description of automatic transmission workstand with description of method for using it violates second paragraph of 35 USC 112, since purpose of that paragraph is to require patentee to provide others with notice of boundaries of protection provided by patent, since manufacturer or seller, at time of making or selling workstand of structure set forth in claim, would have no indication whether it might later be sued for contributory infringement if workstand is used in accordance with claimed method, and since claim is thus not sufficiently precise that possibility of infringement may be determined with reasonable degree of certainty.

Claim which is intended to embrace both product or machine and process is precluded by language of 35 USC 101, which sets forth statutory classes of invention in alternative only, and is also invalid under 35 USC 112, second paragraph, since claim

which purports to be both machine and process is ambiguous and therefore does not particularly point out and distinctly claim subject matter of invention.

4. Claim 28 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 28 depends on claim 21, which was canceled by preliminary amendment. Therefore, there is insufficient antecedent basis for the limitations in the claim.

Upon further review it would appear that claim 28 should have been included with Group I during the restriction/election requirement made in the parent application (09/756,844). During prosecution, claim 21 was indicated by the examiner to be allowable. Accordingly, the applicant incorporated the limitations of claim 21 into independent claim 20 in order to place the application in a condition for allowance. It is recommended that the applicant review MPEP §1401 and 35 U.S.C. 251 (Reissue Applications) in order to attempt to obtain patent rights to the limitations set forth in claim 28.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent 5,665,898 to Smith *et al.* in view of United States Patent 6,155,282 to Zachary *et al.*

Smith discloses a system comprising a first solenoid-actuated valve (reference item 106(a)), a second solenoid-actuated valve (reference item 106(b)), pressure sensing means (reference items 136, 144), and a switch - actuated bypass (reference item 124) with bypass valves (reference items 120 and 128). The first pressure sensor (reference item 136) is associated with the bypass. The second pressure sensor (reference item 144) is associated with the system containing the solenoid-actuated valves. The apparatus is a manifold contained in a housing (see figure 4). It is noted that the forming the manifold of metal such as aluminum would have been an obvious choice due to its light weight, high durability, and corrosion resistance. Smith *et al.* also discloses "logic control" (see column 2, lines 3-67; column 4, lines 1-4).

Smith *et al.* also discloses the testing of the valve safety system. In particular Smith *et al.* teaches that a test is performed by switching a lever (reference item 176) to the test position. Furthermore, a second lever is actuated to one of two test positions (reference items "Test A" or "Test B") in order to individually activate/deactivate the two solenoid-actuated valves. In this manner the two valves can be tested without the need to halt the overall system's (reference item 100) function. Various alarm (reference items 142 and 146) provide indication when the test handle is activated/deactivated and when

the bypass is pressurized/depressurized. The later condition will show when a solenoid valve is activated and deactivated.

Smith *et al.* does not teach a system where individual pressure sensors are associated individually with the solenoid-actuated valves. Providing pressure sensors in direct association with the valves is known in the art and would have been an obvious modification to the teachings of Smith. For example Easter teaches a test mechanism (reference item 10) with a pressure sensor (reference item 30) that is attached to a valve (reference item 12). In this manner the actuating pressure of the individual valve can be verified.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Smith with the teachings of Easter in order to provide a safety system comprising a plurality of solenoid-actuated valves, each with an associated pressure sensor, and then testing the safety system by individually actuating the valves.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A. Rogers whose telephone number is (571) 272-2205. The examiner can normally be reached on Monday - Friday (0730 - 1600).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208.

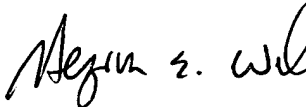
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The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dar 
04 August 2004


HEZRON WILLIAMS
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